Strength in Numbers

A Guide to the 2020 Census Redistricting Data From the U.S. Census Bureau

Why We Do a Census

From Fargo to Fresno, Juneau to Jacksonville, and San Antonio to San Juan, everyone living in the United States and its five territories is required by law to be counted in the census once every 10 years. Data collected from the U.S. decennial census, also known as the decennial population and housing census, determine the number of congressional seats each state has in the U.S. House of Representatives.

The census tells us who we are and where we are going as a nation. The census helps our communities determine where to build everything from schools to supermarkets, homes to hospitals, and retail establishments to recreation centers. The data collected by the decennial census are used to allocate more than $675 billion in federal funds to states, counties, and local communities. Those funds are spent on schools, hospitals, roads, public works, and many other vital programs.

The purpose of the 2020 Census was to conduct a census of population and housing and disseminate the results to the president, the states, and the American people. The goal of the 2020 Census was to count every person living in the United States once, only once, and in the right place, regardless of citizenship status.

This brochure explains where census numbers come from, and the role those numbers play in the way states and communities redraw boundaries of their congressional and legislative districts. Read on to learn about the maps and numbers that states, local governments, and data users access to use in the redistricting process.

Census History

Article 1, Section 2, of the U.S. Constitution established that the apportionment of the U.S. House of Representatives shall be based upon a national census.

The Census Bureau is part of the U.S. Department of Commerce and was created as a permanent organization in 1902; but that is not the first time the United States had conducted a census. The federal government conducted a census long before the Census Bureau was created; the first census was taken in 1790.

That first census began more than a year after the inauguration of President Washington, and shortly before the second session of the 1st Congress ended. Congress assigned responsibility for the 1790 Census to the U.S. Marshals of the federal judicial system. The pay allowed for the 1790 enumerators was very low and did not exceed $1 for every 50 people properly recorded on the rolls.

The 1st Congress established a special committee to prepare the questions to be included in the first census. The suggestions were likely debated in the House, and according to a report in a Boston newspaper, Virginia Representative James Madison recommended at least five of the initial six questions.

The six inquiries in 1790 called for questions on gender, race, relationship to the head of household, name of the head of household, and the number of slaves, if any. U.S. Marshals in some states went beyond these questions and collected data on occupation and the number of dwellings in a city or town.

The first census in 1790 was managed under the direction of Secretary of State Thomas Jefferson. On Census Day, August 2, 1790, U.S. Marshals took the census in the original 13 states, plus the districts of Kentucky, Maine, Vermont, and the Southwest Territory (Tennessee).

The Road to 2020

Before we discuss the 2020 Census, it is important to look at how we got to 2020. In preparing for the 2020 Census, the Census Bureau identified four key innovation areas: reengineering address canvassing, optimizing self-response, utilizing administrative records and third-party data, and reengineering field operations. All four innovation areas aimed at reducing the costs of fieldwork.

Reengineering Address Canvassing

In 1790, some 650 assistants to the U.S. Marshals spent 9 months visiting every home they could identify in the young nation. According to the Census Bureau, they counted nearly 3.9 million people.

For each census from 1970 through 2010, listers were sent out to "pound the pavement" in an operation called Address Canvassing. Listers physically walked around assigned areas in the field to verify, correct, add, or delete housing units to update the census address list prior to conducting the decennial census.

After 2010, evaluations of Address Canvassing showed that much of the work done by listers was verifying existing addresses. In 2012, data sources, methods, and models for identifying areas where the addresses were complete and stable were developed, while address data and imagery were being acquired from partners in tribal, state, and local governments. Partnerships with the National Geospatial-Intelligence Agency (NGA) and the U.S. Department of Agriculture's National Agricultural Imagery Program (NAIP) were also formed to provide satellite and aerial imagery from urban to rural areas.

These efforts helped build the foundation for a process termed In-Office Address Canvassing. During In-Office Address Canvassing, geographic technicians used geographic information and satellite imagery to review 100 percent of the nation's census blocks (11.1 million in total) to categorize blocks as stable, or as requiring in-field validation. By 2019, 65 percent of the nation's addresses were validated in the office. The remaining 35 percent were validated during In-Field Address Canvassing that summer, with address listers traversing the blocks on the ground.

In early 2020, the address frame was established for the 2020 Census from the results of In-Office and In-Field Address Canvassing. The frame included over 152 million addresses that were used to invite people to respond, knock on their doors when they did not, and to tabulate the 2020 Census data to the correct geographic location.

Optimizing Self-Response

Since 1960, most households have responded to the census by filling out a paper questionnaire and mailing the questionnaire back to the Census Bureau. The 2020 Census sought to make responding to the census as easy and efficient as possible by offering response options through the Internet and telephone, in addition to paper questionnaires returned through the mail. In fact, the 2020 Census is the first time respondents could respond to the census through the Internet. Additionally, the 2020 Census provided respondents the convenience to respond without a unique census address identifier for the first time in history. Responses received without a census address identifier were matched to existing addresses in the census address database to determine the correct housing unit from which we received the response. Optimizing self-response sought to reduce the need to conduct expensive in-person follow-up for nonresponding households.

The 2020 Census provided 95 percent of the country an invitation to respond through the mail via the U.S. Postal Service. The remaining 5 percent received a hand-delivered invitation and/or were enumerated by a census taker at their door.

Utilizing Administrative Records and Third-Party Data

The Census Bureau used information that people have already provided, such as administrative records data and third-party data, to improve the efficiency and effectiveness of the 2020 Census. Administrative records data refer to information from federal and state governments. Third-party data refer to information from commercial sources.

Data from both sources help to improve the quality of the address list, increase the effectiveness of advertising and contact strategies, and validate respondent submissions. The use of administrative records and third-party data also helps the Census Bureau reduce the average number of visits to households who do not respond prior to the start of follow-up activities.

Reengineering Field Operations

The goal of this innovation topic was to use technology to efficiently and effectively manage the 2020 Census fieldwork, and as a result reduce the staffing, infrastructure, and brick and mortar footprint required for the 2020 Census. The main components of the reengineered field operations included streamlining the field office and staffing structure, increasing use of technology to conduct operations, and increasing management and staff productivity.

The 2020 Census field operations relied heavily on automation. For example, the Census Bureau provided most census takers with the capability to perform all administrative and data collection tasks directly from a mobile device. Supervisors were also able to work remotely from the field and communicate with their staff via these devices.

Geographic Partnership Programs

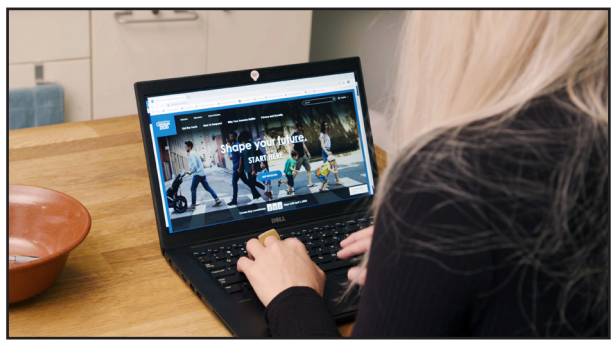
Prior to the 2020 Census, the Census Bureau conducted geographic partnership programs to improve the address and spatial quality of the Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) system to provide meaningful data from the 2020 Census. Throughout the decade leading up to the 2020 Census, the Census Bureau worked closely with tribal, federal, state, and local governments to ensure the success of the geographic partnership programs.

In 2011, the Geographic Support System (GSS) Program was planned to provide the most current, accurate, and complete address, feature, and boundary data to the Census Bureau's customers and data users between decennial censuses. The GSS was successful at acquiring, evaluating, and incorporating current, high-quality address and road data from 1,459 partners that encompassed 38,160 governmental entities, 88.8 percent of the housing units, and 89.0 percent of the population in the 2010 Census.

The Boundary and Annexation Survey (BAS) requests that tribal, state, county, and local governments review and update their legal boundaries every year in the Census Bureau's geographic database.

A community's legal boundaries determine its official data from the 2020 Census, American Community Survey (ACS), and Population Estimates Program. It is up to each government to report its legal boundaries through the BAS.

The Local Update of Census Addresses (LUCA) provides an opportunity for tribal, state, and local governments to review and improve the address lists and maps used to conduct the 2020 Census. Similarly, the New Construction (NC) program utilizes the expertise of tribal, state, and local governments to submit city-style addresses for newly built housing units (HUs). Following LUCA and the Address Canvassing operation, the NC program served as a conclusive effort to complete the update of the 2020 Census Address List.



The Participant Statistical Areas Program (PSAP) allows tribal, regional, and local governments to review and suggest modifications to the boundaries of block groups, census tracts, census county divisions (CCDs), and census designated places (CDPs) every 10 years before the census. This helps define areas without legal boundaries for disseminating data from the 2020 Census and the ACS.

Conducting the 2020 Census

As a part of the 2020 Census, everyone living in the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, and the five U.S. territories is required by law to be counted.

The 2020 Census count officially started on January 21, 2020, with a special operation in the remote Alaska Native village of Toksook Bay and other remote areas of Alaska. Most households across the nation received an invitation to respond to the 2020 Census between March 12 and March 20, 2020.

Invitations to respond included an individualized Census ID and instructions on how to respond to the census online, by phone, or by mail.

Census Day was April 1, 2020. By that date, every household in self-response areas received an invitation to participate in the 2020 Census. Everyone who usually lives and sleeps in the home as of April 1 (including babies and small children) should have been included in household questionnaires and responses.

Self-response areas of the country with low internet connectivity (or other characteristics that made it less likely for households to respond to the census online) received a paper questionnaire in the first invitation mailing. Self-response areas where the Census Bureau determined households were more likely to respond to the census online initially received only a letter inviting them to respond online. All nonresponding households received a paper questionnaire in a later mailing, regardless of whether they had received a paper questionnaire in the first mailing.

In some areas of the country where the majority of housing units either did not have mail delivered to the physical location of the housing unit, or the mail delivery information for the housing unit could not be verified, census workers verified the census address list in person and left a questionnaire package at every housing unit identified to allow the household to self-respond.

During the 2020 Census, the Census Bureau also enumerated nursing/skilled-nursing facilities, college/university student housing, military barracks, adult and juvenile correctional facilities, people experiencing homelessness, campgrounds, marinas, and other transitory locations.

Beyond the situations listed above, there were different methods of collection for other areas, including remote areas, Puerto Rico, the U.S. Island Areas (American Samoa, Commonwealth of the Northern Mariana Islands, Guam, and U.S. Virgin Islands), and areas that experienced a natural disaster.

Toksook Bay, AK

For households that did not respond to the census, enumerators visited to follow up and ensure that everyone was counted in the census from mid-July through October 15.

Due to the COVID-19 pandemic, the Census Bureau adjusted the 2020 Census data collection schedule to protect the health and safety of the American public and Census Bureau employees. Adjustments included following guidance from federal, state, and local authorities regarding COVID-19 to ensure a complete and accurate count of all communities. Data collection activities were originally planned to conclude on July 31, 2020; however, data collection activities were ultimately extended to October 15, 2020. Adjustments to the data collection schedule impacted the data processing and data delivery schedule; the Census Bureau closely managed the processing of data and worked to deliver high-quality, defensible data as close as possible to statutory deadlines.

Protecting Your Data—Title 13

The Census Bureau is legally bound by Title 13 of the U.S. Code. Title 13 authorizes the Census Bureau to conduct surveys and censuses, and mandates that any information collected from individuals and businesses remains confidential.

Title 13 provides the following protections to individuals and businesses:

- Private information is never published. It is against the law to disclose or publish any private information that identifies an individual or business including names, addresses (including GPS coordinates), social security numbers, and telephone numbers.
- The Census Bureau collects information to produce statistics. Personal information cannot be used against respondents by any government agency or court.

Census Bureau employees are sworn to uphold Title 13 to protect the confidentiality of your data. Violating Title 13 is a serious federal crime. Anyone who violates this law will face severe penalties, including a federal prison sentence of up to 5 years, a fine of up to $250,000, or both. Additionally, upholding Title 13 protections is a lifelong, legal obligation.

Protecting Your Data—Disclosure Avoidance

Before we publish any statistic, we apply safeguards that help prevent someone from being able to trace that statistic back to a specific respondent. We call these safeguards "disclosure avoidance," although these methods are also known as "statistical disclosure controls" or "statistical disclosure limitations."

A disclosure of data occurs when someone can use published statistical information to identify an individual who provided information under a pledge of confidentiality. Using disclosure avoidance, the Census Bureau modifies or removes all the characteristics that put confidential information at risk for disclosure. Although it may appear that a table shows information about a specific individual, the Census Bureau has implemented a disclosure avoidance system based on differential privacy to disguise the original data while ensuring the results are useful.

"Differential privacy" is based on the cryptographic principle that an attacker should not be able to learn any more about an individual from the statistics the Census Bureau publishes using an individual's data, than from statistics that do not use an individual's data.

After tabulating the data, the Census Bureau applies carefully constructed algorithms to modify the statistics in a way that protects individuals while continuing to yield accurate results. The Census Bureau assumes that everyone's data are vulnerable and provides the same strong, state-of-the-art protection to every record in its database. While the risk of database reconstruction has been understood for decades (and wasn't a significant threat in prior censuses), recent advances in technology have increased the risk of data reconstruction. Therefore, the 2020 Census Disclosure Avoidance System (DAS) uses differential privacy to defend against disclosure.

The DAS incorporates statistical methods such as "noise injection" to protect the data from disclosure. Noise injection alters the underlying statistical tabulations before publication and has been a key feature of Census Bureau confidentiality protection systems for decades.

Enough noise must be added to protect confidentiality, but too much noise could damage the statistics' fitness-for-use. Adding noise doesn't make database reconstruction impossible.

Instead, it makes it so that there is no way to tell if the reconstructed database is correct. A privacy-loss budget is set to control the amount of noise that must be added to protect confidentiality while maintaining the data's fitness-for-use. Because of privacy protection, users should not assume that tables with cells having a value of 1 or 2 reveal information about specific individuals. In previous decennial censuses (beginning in the 1990 Census through the 2010 Census), data swapping procedures were used.

The benefits of differential privacy protect against database reconstruction and ensure that privacy guarantees are:

- Tunable and provable.
- Future-proof.
- Public and explainable.

Protecting Your Data—The TopDown Algorithm

The TopDown Algorithm is the mechanism the DAS uses to protect the P.L. 94-171 data using differential privacy. The TopDown Algorithm, which has been carefully tuned to ensure fitness-for-use of the P.L. 94-171 data, functions as follows:

- After the confidential Census Edited File is input into the DAS, the system's TopDown Algorithm takes an extensive series of differentially private "noisy" measurements.
- The algorithm uses these measurements to generate privacy-protected microdata records for the entire nation.
- These individual records contain every level of geography on the Census Bureau's geographic backbone based on the noisy measurements taken at each of those geographic levels and subject to the population invariants and other constraints (discussed below).
- These microdata records are exported into the tabulation system to generate the data products for this publication.
- The resulting data reflect the privacy guarantees defined in the global privacy-loss budget for the 2020 Census, incorporating the greatest level of uncertainty at the census block level (where privacy risk is usually greatest), while providing increasingly accurate measures of the nation's population at each higher level of geography.

Protecting Your Data—Invariants and the Privacy-Loss Budget

To satisfy the Census Bureau's constitutional mandate to apportion representatives for the House of Representatives according to the actual enumerated population, the DAS departs from pure differential privacy in a few ways. The total population for each state is held invariant—used exactly as enumerated and with no noise added. Similarly, the total number of housing units in each census block and the number and type of each group quarters unit in each census block are also held invariant.

The Census Bureau's Data Stewardship Executive Policy Committee (DSEP) decides the global privacy-loss budget for the 2020 Census. The Census Bureau will communicate the value of the global privacy-loss budget and its allocation across the 2020 Census data products to the data user community following that decision.

More information on the Census Bureau's modernization of its disclosure avoidance processes is available at <www.census.gov/programs-surveys/decennial-census/2020-census/planning-management/2020-census-data-products.html>.

More information on data protection and differential privacy is available at <www.census.gov/privacy>.

More information on the Census Bureau's application of these methods is available in the working papers and supporting privacy information at <www.census.gov/about/policies/privacy/statistical_safeguards.html>.

Apportionment

The constitutional requirement that the decennial census fulfills is the apportionment of seats allocated to the states for the U.S. House of Representatives. There are 435 members in the U.S. House of Representatives, divided amongst the 50 states. Each representative is elected by the voters of a congressional district. This apportionment requirement is mandated in the U.S. Constitution:

- Article 1, Section 2 of the U.S. Constitution mandates that the actual enumeration shall be made within three years after the first meeting of the Congress of the United States, and within every subsequent term of 10 years. This was revised by the 14th Amendment, Section 2—"Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State."

The universe is traditionally based upon the total resident population (citizens and noncitizens) of the 50 states. For recent censuses and the 2020 Census, the apportionment population also includes U.S. armed forces personnel and federal civilian employees (and their dependents living with them) who are deployed or stationed outside the United States that can be allocated back to a home state.

Apportionment is the process of determining each state's entitlement of representatives. How does the Census Bureau figure in this process? Our role is twofold—to conduct the census, and as part of the executive branch, to calculate the apportionment based upon the census results. Once we conduct the census and compile the results, the method of equal proportions is used to determine the number of representatives each state receives.

Generally speaking, more populous states have more seats in the U.S. House of Representatives than less populous states. The rate of population increase also matters as representation is based on relative population increases between decennial censuses. Therefore, if a state has a population increase but at a slower rate of growth, it could possibly lose a seat in the U.S. House of Representatives.

Figure 1 shows changes in apportionment that resulted from the 2020 Census apportionment count.

Presidential Role

Also according to Title 2, U.S. Code, within 1 week of the opening of the next session of the Congress, the president must report to the clerk of the U.S. House of Representatives the apportionment population counts for each state and the number of representatives to which each state is entitled. Within 15 days of the announcement to Congress, the clerk of the U.S. House of Representatives must inform each state governor of the number of representatives to which each state is entitled.

Once the number of seats assigned to the individual states is determined, the task of redistricting at the state level begins.

Redistricting and Voting Rights

Once the apportionment counts are delivered to the president and Congress, the Census Bureau shifts focus to preparing and delivering data to the states to support the redistricting process.

U.S. Supreme Court decisions handed down during the 1960s clarified the Constitution's intention to provide equality of representation for all Americans. In 1964, the *Wesberry v. Sanders* decision held that, "as nearly as is practicable one person's vote in a congressional election is to be worth as much as another's." That same year, in *Reynolds v. Sims*, the Court ruled that state legislative districts must be "as nearly of equal population as is practicable."

These cases, in conjunction with the Public Law 88-352 (78 Stat. 241), popularly known as the 1964 Civil Rights Act, established the principle of "one person, one vote" and equality in representation in the U.S. House of Representatives and state upper and lower assemblies, respectively.

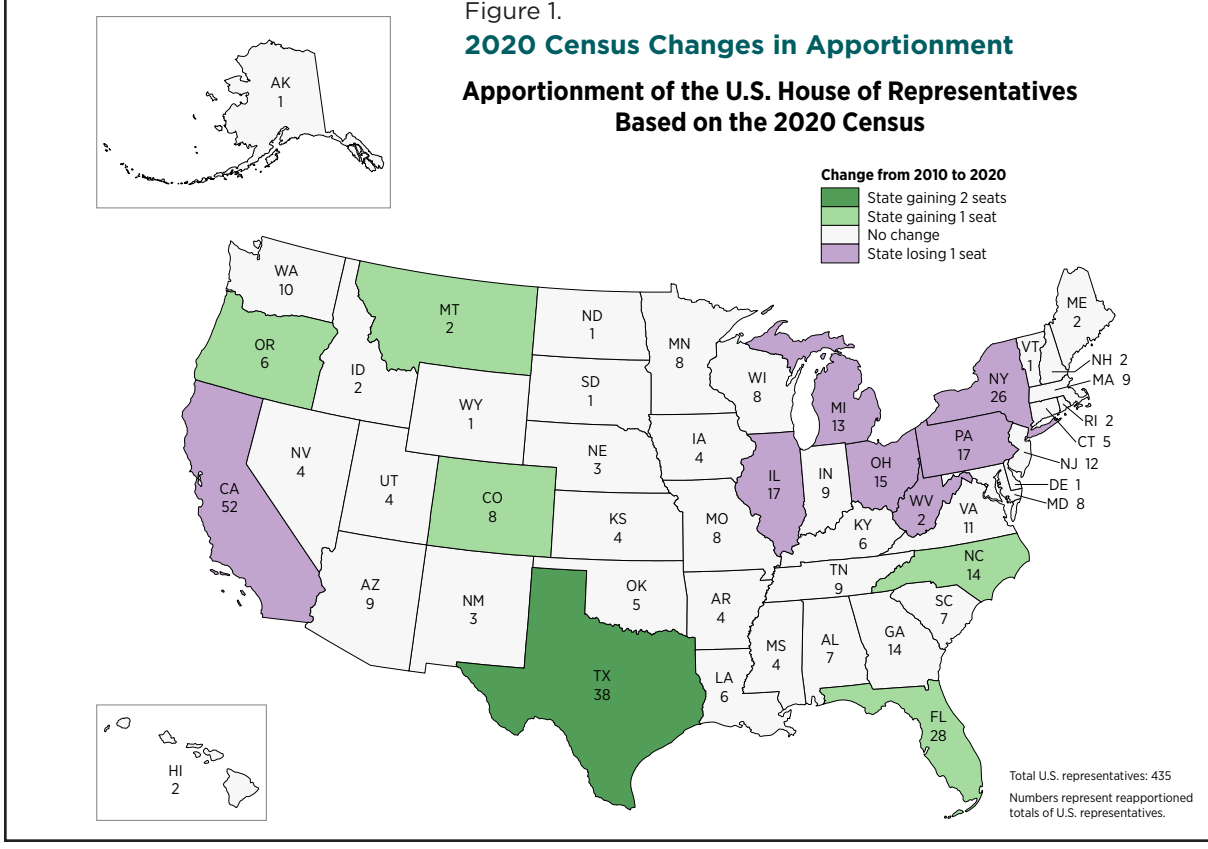
Both U.S. congressional districts and state legislative districts must be drawn so that their residents have a fair and equal share in the way they are governed. These Supreme Court decisions increased the states' need for geographically detailed census information in the redistricting process.

The court decisions we've discussed prompted Congress to pass P.L. 94-171 which requires the Census Bureau to provide the states with the necessary small-area census data (including total population), for legislative redistricting within 1 year from Census Day.

Figure 1.

2020 Census Changes in Apportionment

Apportionment of the U.S. House of Representatives Based on the 2020 Census



P.L. 94-171 sets up a voluntary program between the Census Bureau and those states that wish to receive population tabulations for voting districts and other state-specified geographic areas.

Under this program, those responsible for legislative apportionment or redistricting in each state may devise a plan identifying the census blocks and voting districts for which they want to receive specific tabulations and submit them to the Census Bureau.

Since the inception of the Census Redistricting Data Program (RDP) for the 1980 Census, the Census Bureau has included summaries for the major race groups specified by the Statistical Programs and Standards Office of the U.S. Office of Management and Budget (OMB) in Directive 15 (as issued in 1977 and revised in 1997).

About the Redistricting Data Program

P.L. 94-171 stipulates that the U.S. Census Bureau work in a nonpartisan manner with the states to identify and provide the small-area population counts necessary for legislative redistricting. The Census Bureau is required to provide these counts to the governor, the legislative majority and minority leaders, and the public bodies responsible for legislative redistricting in each state within 1 year of Census Day.

The Census Redistricting and Voting Rights Data Office (CRVRDO) implements the requirements of P.L. 94-171 through the 2020 RDP. Goals of the program include:

- Providing states with the opportunity to influence the creation of 2020 tabulation blocks by suggesting linear features to be used or not used for block boundaries.
- Providing states the opportunity to submit voting district (e.g. precincts, wards), state legislative district, and congressional district boundaries to the Census Bureau.
- Providing states with 2020 Census data tabulated to the blocks, voting districts, state legislative districts, and congressional districts they submitted for use in redistricting efforts.
- Providing states with 2020 Census geographic support products to support post-2020 redistricting work, including digital boundary files and maps.
- Providing states the opportunity to comment on the format and content of 2020 Census data tabulations and geographic support products.

The Census Bureau officially established the 2020 RDP in the Federal Register on July 15, 2014. In 2015, the CRVRDO centralized the RDP at the Census Bureau headquarters in Suitland, MD, and added permanent and temporary staff to manage and conduct the 2020 RDP. By centralizing the RDP, the CRVRDO was able to standardize communication with state redistricting partners and review processes for incoming and outgoing redistricting data. Shortly thereafter, the CRVRDO invited state governors and legislative leadership in each state to designate a nonpartisan liaison to represent the state. The nonpartisan state liaison serves as the primary point of contact between the Census Bureau and the state throughout the lifecycle of the Redistricting Data Program.

In late 2015, CRVRDO staff began meeting with state officials (when requested by the official liaison) to discuss benefits of participation in the 2020 RDP. Kick off meetings were held at 26 state capitols, where CRVRDO staff presented details of the 2020 RDP and other decennial census activities. In addition to those 26 state kickoff meetings, redistricting staff performed on-site training for 11 states and Puerto Rico on how to participate in the 2020 RDP.

James Whitehorne, chief, Census Redistricting and Voting Rights Data Office, answers questions about the 2020 Census Redistricting Data Program at a 2019 National Conference of State Legislatures Redistricting Summit in Columbus, OH.

Colleen Joyce, former assistant chief, and Jennie Karalewich, lead redistricting specialist, CRVRDO, promote the 2020 Census and the Redistricting Data Program at the 2018 National Conference of State Legislatures Legislative Summit in Los Angeles, CA.

Phase 1: Block Boundary Suggestion Project 2016–2017

The first phase was the Block Boundary Suggestion Project. Phase 1 was divided into two cycles, the initial delineation (BBSP) and the verification (BBSPV).

During Phase 1, the main goal was for the participants to identify features that should be either held as a block boundary or not held as a block boundary when the blocks are drawn for the 2020 Census. Participants were encouraged to use the supplied prototype block files to enhance their block flagging.

In addition to block boundary flagging, participants could make updates to linear features such as roads, rails, and rivers; area landmarks (e.g., parks, lakes); point landmarks (e.g., monuments); and suggest updates to legal boundaries. These actions allowed states to construct some of the small-area geography they would need for legislative redistricting.

Phase 1 participation was voluntary, with 36 states and state equivalents participating in the BBSP initial delineation, and 34 participating in the BBSP verification (BBSPV) (Table 1).

Table 1.
Phase 1: Block Boundary Suggestion Project Participation

Phase 1	Submission cycle	Total number of participating states[1]	Total number of counties updated
Block Boundary Suggestion Project—Initial Delineation (BBSP)	January–May 2016	36	1,151
Block Boundary Suggestion Project Verification (BBSPV)	January–May 2017	34	965
BBSP/BBSPV total participation	NA	41	1,413

NA Not applicable.
[1] Includes Washington, DC, and Puerto Rico.

Phase 2: Voting District Project 2017–2020

The second phase was the Voting District Project. Phase 2 was divided into three cycles, the initial delineation (VTD) where participants would submit their VTDs, initial verification (VTDV) where participants review their VTDs to ensure correct representation, and final verification (VTDV2) where participants had a final chance to review and verify the VTDs they previously submitted and updated during the first two cycles of the project.

Voting Districts are collected for the census, included in the redistricting products, and then removed from MAF/TIGER. Therefore, when starting their VTD submission, participants had the option to use the 2010 VTD Shapefiles conflated to match current TIGER boundaries, use their own VTD shapefile, or start with a blank VTD shapefile.

During VTDV and VTDV2, participants who submitted their VTDs could use a verification tool in the Geographic Update Partnership Software (GUPS) to identify differences between their shapefile and what is currently in MAF/TIGER to review and make any corrections to their VTDs.

In addition to voting district updates, participants could update state legislative district and congressional district boundaries. As with the BBSP, participants also made updates to linear features and area landmarks, and suggested updates to legal boundaries.

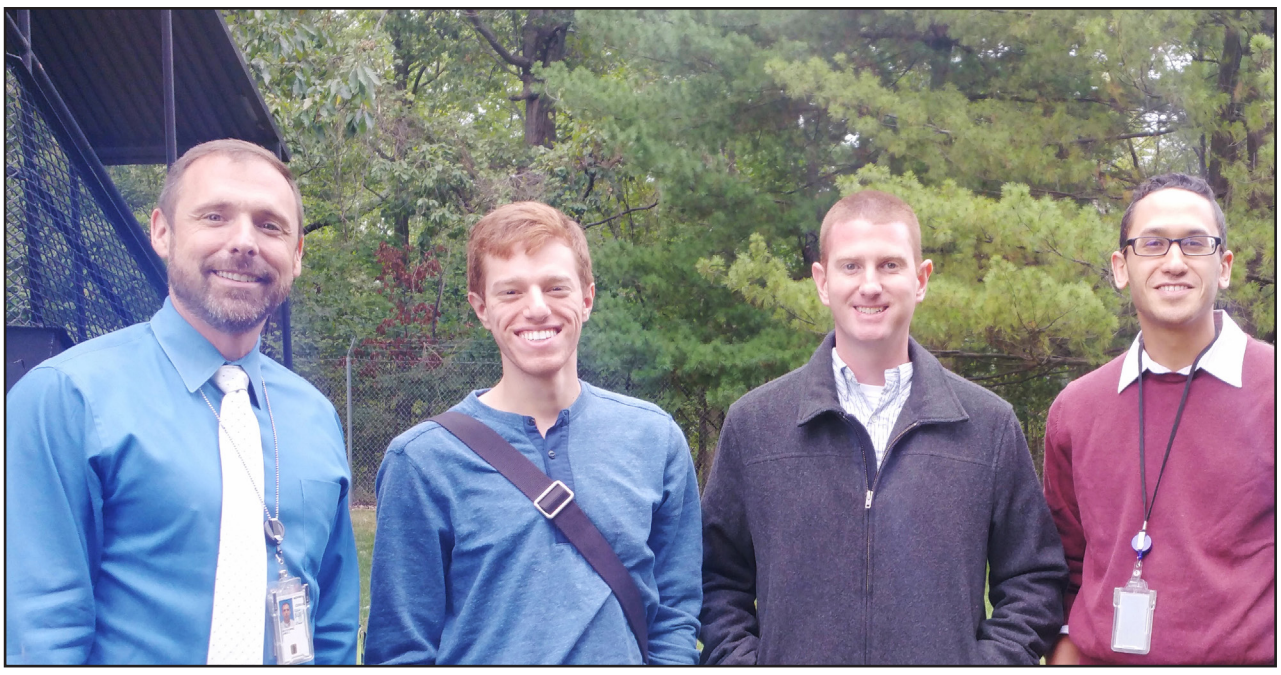
As with Phase 1, Phase 2 participation was voluntary. A total of 45 states and state equivalents participated in the Voting District Project—initial delineation, while 47 and 37 states and state equivalents participated in the first and second rounds of verification, respectively. Additional details are provided in Table 2.

Participation information is provided for each round of update and review in Phase 1 and Phase 2 of the 2020 RDP in Table 3.

Phase 3: Delivery of the 2020 Census P.L. 94-171 Redistricting Data Files and Geographic Products

Phase 3 constitutes the delivery of the redistricting data files and the geographic support products to the states. For this census, the redistricting data files include population counts for small areas within each state, as well as housing occupied/vacancy counts.

Jennie Karalewich, lead redistricting specialist, CRVRDO, enjoys a nice stroll on a chilly day in Lansing, MI, after conducting a VTDV training with state officials in January 2019.



James Whitehorne, chief; Evan Neuwirth, geographer; Mike Arthur, geographer; and Matt Brooks, geographer, CRVRDO, pose for a photo at Census Bureau headquarters in Suitland, MD, in 2016.

Table 2.
Phase 2: Voting District Project Participation

Phase 2	Submission cycle	Total number of participating states[1]	Total number of counties updated
Voting District Project—Initial Delineation (VTD)	January–May 2018	45	2,729
Voting District Project Verification (VTDV1)	January–May 2019	47	1,853
Voting District Project—Verification 2 (VTDV2)	January–March 2020	37	1,339
VTD/VTDV1/VTDV2 total participation	NA	49	3,099

NA Not applicable.
[1] Includes Washington, DC, and Puerto Rico.

Table 3.
Participation by State by Program Phase and Cycle

ID	State	BBSP	BBSPV	VTD	VTDV1	VTDV2
01	Alabama	x	–	x	x	–
02	Alaska	x	x	x	x	x
04	Arizona	x	x	x	x	x
05	Arkansas	–	x	x	x	x
06	California	x	x	–	–	–
08	Colorado	x	x	x	x	x
09	Connecticut	–	–	x	x	x
10	Delaware	–	–	x	x	–
11	District of Columbia	x	–	x	x	–
12	Florida	x	x	x	x	x
13	Georgia	x	–	x	x	x
15	Hawaii	x	x	–	–	–
16	Idaho	–	–	–	x	x
17	Illinois	–	–	x	x	x
18	Indiana	x	x	x	x	x
19	Iowa	x	x	x	x	x
20	Kansas	x	–	x	x	x
21	Kentucky	–	–	x	x	x
22	Louisiana	x	x	x	x	x
23	Maine	x	x	x	x	–
24	Maryland	x	x	x	x	x
25	Massachusetts	x	x	x	x	x
26	Michigan	x	x	–	x	x
27	Minnesota	x	x	x	x	x
28	Mississippi	x	–	x	x	x
29	Missouri	x	x	x	x	x
30	Montana	x	x	x	x	x
31	Nebraska	x	x	x	x	–
32	Nevada	x	–	x	x	x
33	New Hampshire	x	x	x	x	–
34	New Jersey	x	x	x	x	x
35	New Mexico	x	x	x	x	x
36	New York	x	x	x	x	–
37	North Carolina	–	–	–	x	x
38	North Dakota	–	–	x	–	–
39	Ohio	–	x	x	x	x
40	Oklahoma	–	–	x	x	x
41	Oregon	–	–	–	–	–
42	Pennsylvania	–	–	x	x	x
44	Rhode Island	x	x	x	x	x
45	South Carolina	x	x	x	x	x
46	South Dakota	–	x	–	x	x
47	Tennessee	x	x	x	x	–
48	Texas	–	–	x	x	x
49	Utah	x	x	x	x	x
50	Vermont	–	x	x	x	–
51	Virginia	x	x	x	x	x
53	Washington	x	x	x	x	x
54	West Virginia	x	–	x	x	–
55	Wisconsin	–	x	x	x	x
56	Wyoming	x	x	x	x	–
72	Puerto Rico	x	x	x	–	x

x Represents participation.
– Represents nonparticipation.

In January and February 2021, the Census Bureau delivered the geographic support products to the states. That was followed by the Census Bureau releasing legacy format redistricting data files to the states and the public in August 2021. The legacy format files consisted of a geographic header file and three data segment text files, collectively comprised of the six P.L. 94-171 tables.

The user-friendly formatted P.L. 94-171 redistricting data were then delivered to official state recipients on physical media and released to the states and the public at <https://data.census.gov> in September 2021.

The geographic products include:

- 2020 Census P.L. 94-171 Maps.
  - Voting District/State Legislative District Reference Maps.
  - County Block Maps.
  - Tract Reference Maps.
  - School District Reference Maps.
- 2020 Census P.L. 94-171 TIGER/Line® Shapefiles.
- 2020 Census P.L. 94-171 Block Assignment Files and Name Lookup Tables.
- 2020 Census P.L. 94-171 Block Relationship Files (crosswalk of 2010 blocks to 2020 blocks).

The data products include:

- 2020 Census State Redistricting Data P.L. 94-171 Summary Files.

The P.L. 94-171 summary files include population totals and summaries by race, Hispanic or Latino ethnicity, and voting age for all appropriate geographic areas (states, counties or equivalent areas, state legislative districts, voting districts, county subdivisions, school districts, places, American Indian/Alaska Native/Native Hawaiian areas, census tracts, block groups, and blocks). These files also include housing unit counts by occupancy status and total population counts in group quarters.

Phase 4: Collection of Post-2020 Census Redistricting Plans (2021–2023)

During Phase 4 (2021–2023) the CRVRDO will collect the post-2020 Census state legislative and congressional district plans, delineated using the Phase 3 materials, from participating states.

The Census Bureau will incorporate the updated state legislative and congressional district boundaries into the MAF/TIGER system, produce geographic products and tabulate 2020 Census data for these new boundaries, and release the geographic products and 2020 Census data to the states and the public. Additionally, the geographic and tabulated data products will be delivered to the U.S. Postal Service, U.S. Department of Justice, and Congress as required by law.

The ACS will release data for the new congressional district plans in both the 1-year and 5-year estimates products, and release data for the new state legislative district plans in the 5-year estimates product. Following the release of the decennial data, updates to congressional and state legislative plans are solicited every 2 years through the RDP.

Phase 5: Evaluation of the 2020 Census Redistricting Data Program and Recommendations for the 2030 Census (2021–2025)

The final phase of the 2020 RDP (Phase 5) will be an evaluation of the 2020 program, and solicitation of recommendations for the 2030 Census RDP. Working directly with stakeholders and the official program liaisons, the Census Bureau will conduct a historical review by the states of the successes and shortcomings of the 2020 Census and whether it fulfilled the P.L. 94-171 mandate. This collaborative effort will develop recommendations for the 2030 Census RDP. At the close of Phase 5, the Census Bureau will publish the 2030 Census Design in the fifth edition of the Designing P.L. 94-171 Redistricting Data for the 2030 Census—The View From the States.

Tom Morton, assistant chief, CRVRDO, prepares to present an overview of the 2020 Census and Redistricting Data Program to stakeholders.

Updates for the 2020 Redistricting Data Program

There were several major differences between the 2020 and the 2010 Redistricting Data Programs; the highlight being the separation of the BBSP and the VTD phases into two separate projects (unlike the single project they were in 2010). These projects used the Geographic Update Partnership Software (GUPS) but allowed the use of any geographic information system software for participation. These projects also allowed for suggesting updates to legal boundaries for the first time in the program's history, something that has been requested for several decades.

New Tools for the 2020 Redistricting Data Program

For 2020, some tools used last decade were replaced by new ones. The two replacement tools were the GUPS, replacing the MAF/TIGER Partnership Software; and the new Census Data Explorer platform through <https://data.census.gov>, replacing American FactFinder (AFF). Additionally, we added the prototype block files to our array of Census Bureau tools. The prototype block files were developed to assist program participants.

Prototype Block Files

The official 2020 Census blocks were created using an algorithm that looked at the features, the feature type, and other data in the MAF/TIGER system to create the blocks. Annually from 2015 through 2019, we ran the algorithm on the current MAF/TIGER system and created prototype block files. These prototype blocks provided a snapshot of possible 2020 Census blocks based on the current geography at the time of their creation. This allowed the states to make more accurate choices during the BBSP and VTD projects.

GUPS

GUPS is customized Geographic Information System (GIS) software provided by the Census Bureau based on the open-source platform QGIS. GUPS is tailored to meet the needs of participants without extensive GIS experience, and replaced the MAF/TIGER Partnership Software (MTPS) previously used in 2010. It is important to note that the use of GUPS was not required, and participants could use other geographic software to make their Phase 1 and Phase 2 updates.

Participants who used GUPS for Phase 1 and Phase 2 were able to directly download the correct census data, view preformatted files, use built-in quality control checks, bring in their own data (in shapefile format), access tabular equivalency files and web mapping services, view current high resolution imagery, and export their submission into a zip file for delivery to the Census Bureau.

Participants used the GUPS interface shown in Figure 2: GUPS Interface to update and submit Phase 1 and Phase 2 plans to the Census Bureau.

Data.census.gov

The U.S. Census Bureau's new platform to access data is data.census.gov <https://data.census.gov>. The vision for data.census.gov is to improve the customer experience by making data available from one centralized place so that data users spend less time searching for data content and more time using it. A screenshot of the data.census.gov landing page is shown in Figure 3.

The data.census.gov platform is built on the Census Bureau data application programming interface, or API, which provides users with direct access to the data they want. As data users perform searches on the platform, they make direct calls to the data, metadata, and geospatial services in a way that was not available through the AFF. This creates new opportunities for data visualizations, maps, and other data displays that users need. The AFF was taken offline on March 31, 2020.

Figure 2.
GUPS Interface

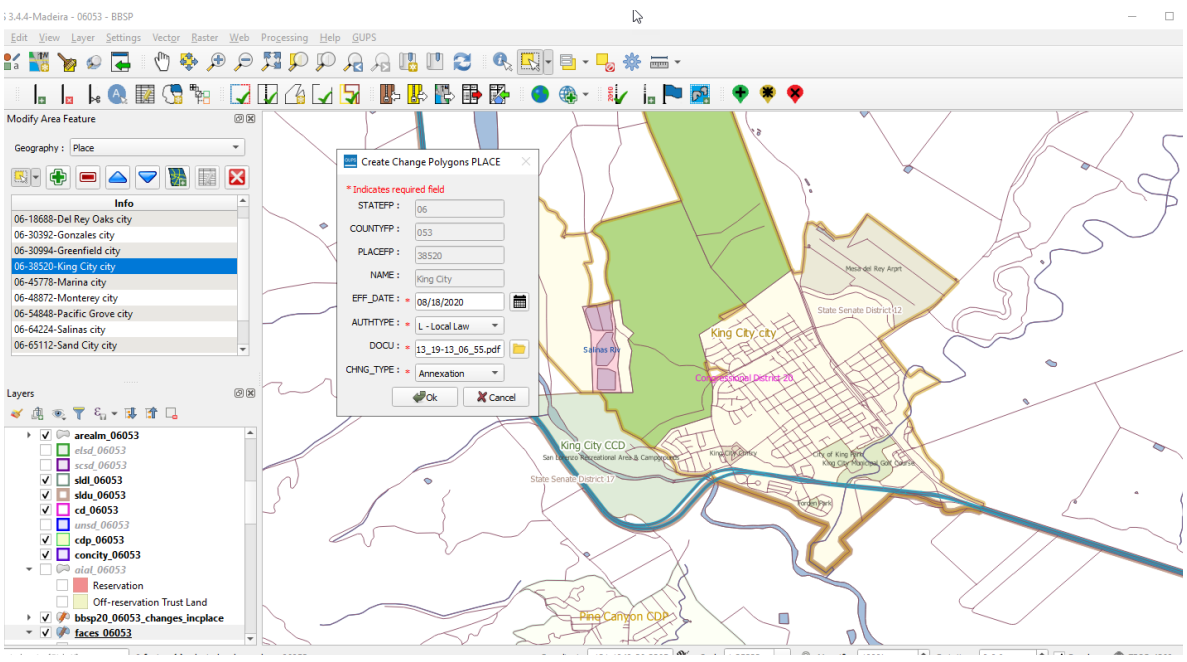
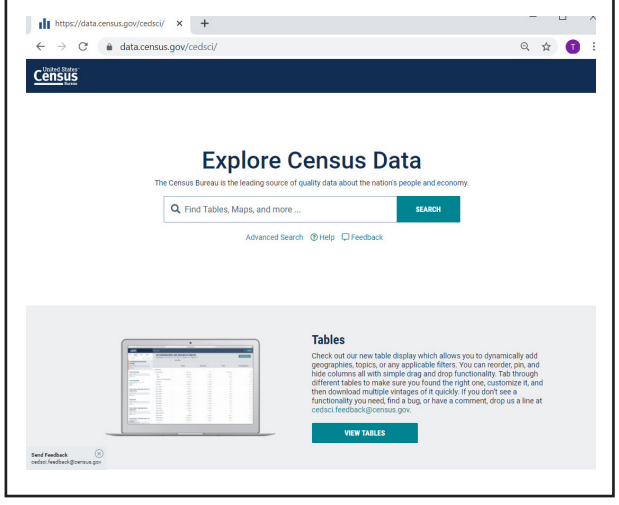


Figure 3.
Data.census.gov Landing Page



MAF/TIGER

MAF/TIGER® is an acronym for the Master Address File/Topologically Integrated Geographic Encoding and Referencing system. It is a digital (computer-readable) geographic database system that automates the mapping and related geographic activities required to support the U.S. Census Bureau's census and survey programs.

The Census Bureau developed the TIGER® system to automate the geographic support processes required to meet the major geographic needs of the 1990 Census. The platform is capable of producing the cartographic products used to support data collection and map presentations, providing the geographic structure for tabulation and dissemination of the collected statistical data, assigning residential and employer addresses to the correct geographic locations, and relating those locations to the geographic entities used for data tabulation.

The MAF/TIGER system contains boundaries and codes for all legal, administrative, and statistical geographic areas for which the Census Bureau collects and tabulates data. Legal geographic areas include American Indian/Alaska Native areas, states, counties, townships, cities (places), and similarly functioning general-purpose governments. Administrative areas include redistricting geographies, such as congressional districts, state legislative districts, and voting districts. Statistical areas include census tracts, block groups, census designated places, census county divisions, and census blocks.

Since MAF/TIGER is an integrated system, several features and boundaries can share the same edge. For example, the main street running through a community may represent the boundary of any combination of legal, administrative, and statistical boundaries (e.g., one edge represents the boundary for census block, place, voting district, state legislative district, census tract, and block group).

Census Geography for Redistricting

There are several types of geographies that are of interest for redistricting and are included in the geographic products that we distribute in the P.L. 94-171 data set. These geographic types include: blocks, block groups, census tracts, voting districts, and congressional and state legislative districts. Figures 4 and 5 show the standard hierarchies of census geographic entities and American Indian, Alaska Native, and Native Hawaiian Areas respectively.

Census blocks are the building blocks of all census geographies. These blocks are normally bounded by streets, other prominent physical features, or by other geographic areas. Census blocks may be as small as a typical city block that's bounded by four streets, or larger than 100 square miles in some rural areas. Blocks are identified by a four-digit number that is unique within census tracts for the 2020 Census. There are no population criteria for blocks, however, nationally, blocks average about 100 people each.

Census block groups are a set of census blocks with the same first digit within a census tract. For example, all blocks in a census tract in the 1000 range define block group 1.

Census tracts are statistical areas averaging 4,000 people within a county or equivalent area. These areas typically remain constant from census to census and thus are useful for longitudinal studies and a variety of applications.

Voting districts include areas such as election districts, wards, or precincts identified by the states during Phase 2 of the 2020 RDP. States participating in the RDP provided updated voting district boundary, code, and name information.

Legislative districts are used to determine the level of local representation when electing a member to the upper (senate) or lower (house) chambers of state legislatures. As with voting districts, states define these areas.

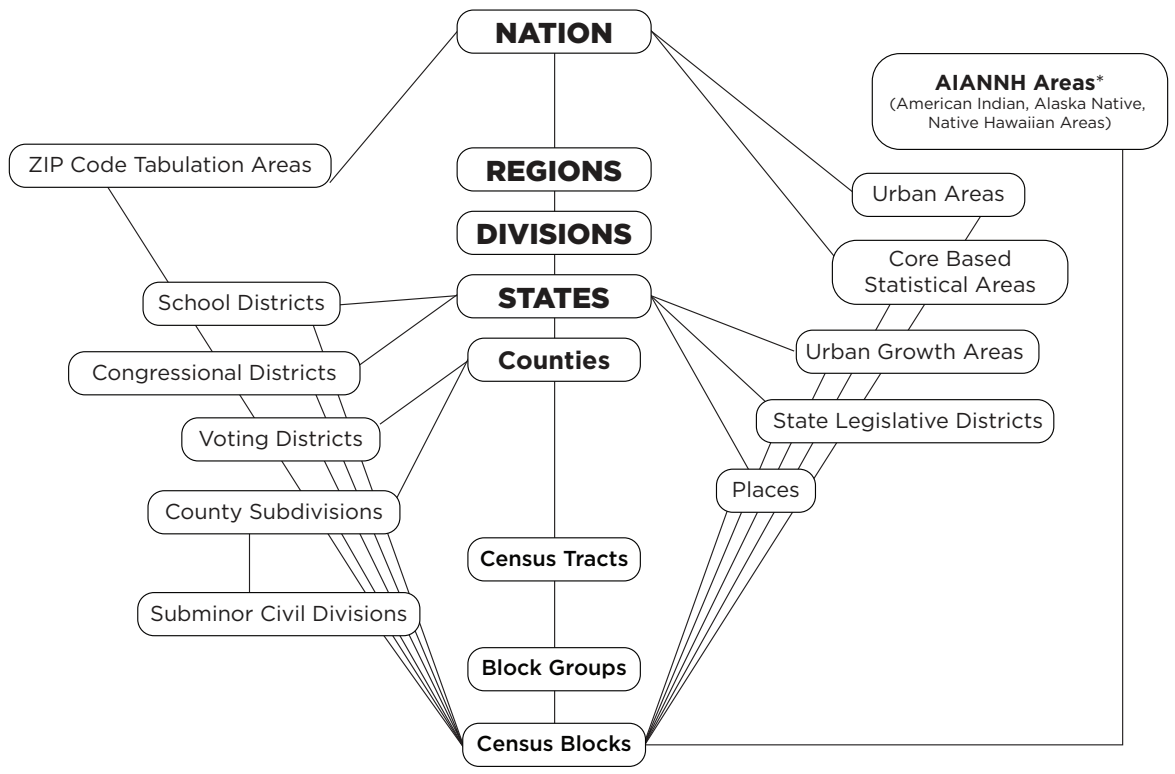
Congressional districts are the 435 areas from which members are elected to the U.S. House of Representatives. Each state with multiple seats is responsible for establishing congressional districts for the purpose of electing representatives. Each congressional district is to be as equal in population to all other congressional districts in a state as practicable. The boundaries and numbers shown for the congressional districts are those specified in the state's laws or court orders establishing the districts within each state.

Geographic Support Products for Redistricting

The data presented in the P.L. 94-171 data set are tabulated to the geographic areas featured in the geographic products provided to the states to support their redistricting efforts. The Census Bureau has made the 2020 Census geographic products as detailed as possible to convey the greatest detail about small areas.

The geographic support products include 2020 Census P.L. 94-171 block reference maps, state legislative with voting district reference maps, tract reference maps, school district reference maps, TIGER/Line Shapefiles, block assignment files and corresponding name lookup tables, and 2010 to 2020 census block relationship files. These geographic products were delivered to official

Figure 4.
Standard Hierarchy of Census Geographic Entities



* Refer to the "Hierarchy of American Indian, Alaska Native, and Native Hawaiian Areas"

recipients of the redistricting data program on removable media in support of redistricting efforts. These products are available for download on the CRVRDO Internet site at <www.census.gov/rdo>.

The P.L. 94-171 maps are on as few map sheets as possible, are digital, and are in portable document format (.pdf). The map scales vary from county to county depending on area size and population density. In areas where a high level of detail is required, insets are used to ensure a readable map.

County Block Reference Maps: These maps show the smallest tabulation areas—census blocks—that can be used in the redistricting process. Map sheets are organized by county. For the block map, an index sheet shows the layout of the relationship between individual map sheets within the county. A 2020 county block reference map is shown in Figure 6.

VTD/SLD Reference Maps: These maps cover a state legislative district and show the outline of voting districts (if defined).

These maps provide a quick picture of areas that can be used as references for constructing new legislative districts. These maps also show the boundaries of the current state legislative districts.

Tract Reference Maps: These county-based maps show and label the census tracts delineated to support 2020 Census data dissemination. In addition to census tracts, these maps show the boundaries and names of American Indian areas, Alaska Native areas, Hawaiian home lands, states, counties, county subdivisions, and places.

These maps display a base feature network including roads, railroads, and water bodies.

School District Reference Maps: These county-based maps show and label the unified, secondary, and elementary school districts as delineated by the state participants of the School District Review Program (SDRP).

In addition to school districts, these maps show the boundaries and names of American Indian reservations, states, counties, and places. Additionally, these maps display a base feature network including roads and water bodies. Each set of county-based school district reference maps is accompanied by a School District to Map Sheet relationship file, which includes a record for each school district within the county or state.

TIGER/Line Shapefiles: Shapefiles are a geospatial data format for use in geographic information systems (GIS) software. Shapefiles spatially describe data such as points, lines, and polygons, representing geographic boundaries, roads, lakes, and landmarks. The shapefiles from MAF/TIGER, referenced as TIGER/Line Shapefiles, provide the ability to display and utilize the full set of geographic types which are reported in the redistricting data.

Block Assignment Files and Corresponding Name Lookup Tables: Block assignment files (BAFs) contain census block codes and geographic area codes for a specific, geographic entity type. Each BAF contains every block within a given state, even if the block is not within one of the geographic areas represented in the file. For blocks where no geographic area is present, the block is listed, followed by one or more line breaks. The Corresponding Name Lookup Tables contain the names and codes of every geographic area of the specific type within the state. The name lookup tables can be appended to the block assignment files based on the geographic area codes provided in both tables.

Figure 5.

Standard Hierarchy of American Indian, Alaska Native, and Native Hawaiian Areas

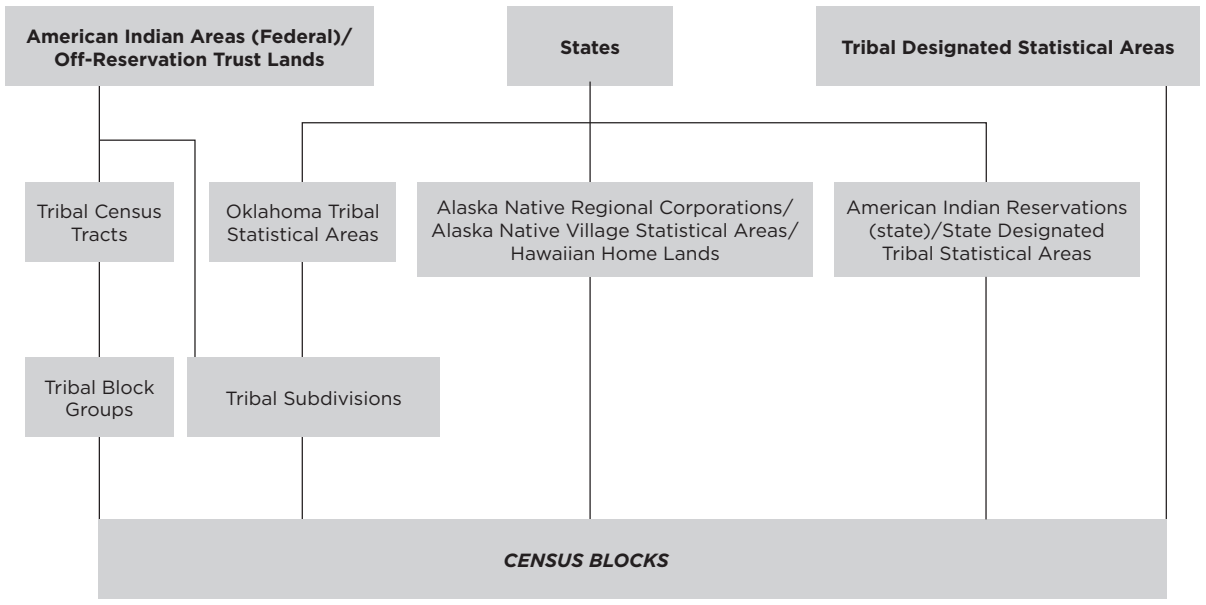
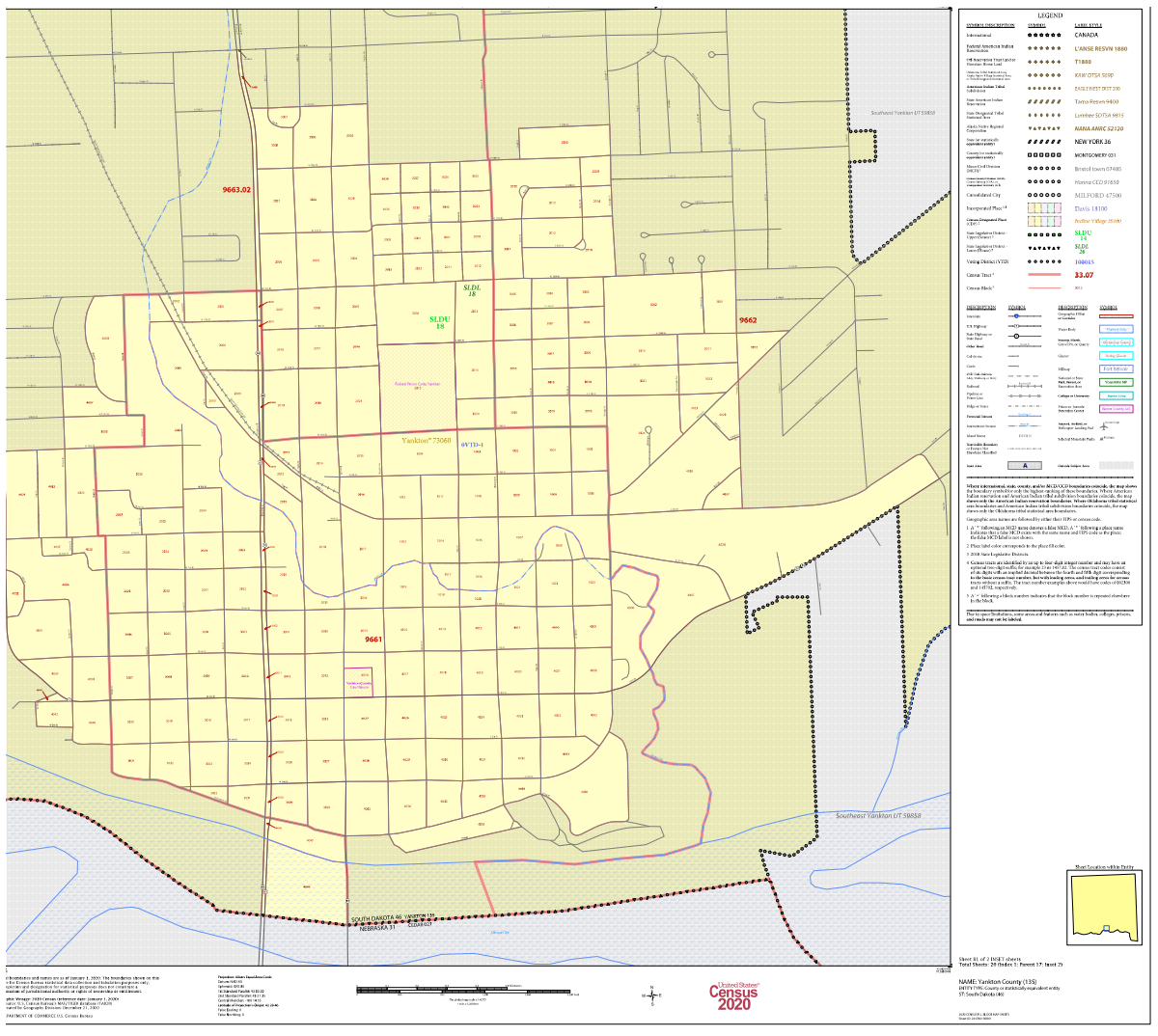


Figure 6.

2020 County Block Reference Map for Yankton County, South Dakota



2010 to 2020 Census Block Relationship Files: These are state-based tabular files that provide a crosswalk between the 2010 and 2020 census blocks. Block relationships may be one-to-one, one-to-many, or many-to-one. Each file contains records for all block relationships in a given state.

P.L. 94-171 Redistricting Data File

P.L. 94-171 requires the Census Bureau to furnish basic tabulations of population to each state. All federal statistical agencies, including the Census Bureau, must adhere to the 1997 Office of Management and Budget (OMB) Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. The OMB standards specify five minimum categories for data on race: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White; and two categories for data on ethnicity: Hispanic or Latino and Not Hispanic or Latino. Since the inception of the Census RDP for the 1980 Census, the Census Bureau has included summaries for the major race groups.

The OMB standards explain that the specified race and ethnicity categories are sociopolitical constructs and should not be interpreted as being scientific or anthropological in nature. The OMB standards provide the following definitions for the race and ethnicity categories:

- American Indian or Alaska Native. A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
- Asian. A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- Black or African American. A person having origins in any of the black racial groups of Africa. Terms such as Haitian or Negro can be used in addition to Black or African American.

Table 4.

2020 Census State Redistricting Data (Public Law 94-171) Summary File Layout

Table number	Cell count	Indent	
P1.		0	**RACE [71]**
P1.		0	Universe: Total population
P1.	1	0	Total:
P1.	2	1	Population of one race:
P1.	3	2	White alone
P1.	4	2	Black or African American alone
P1.	5	2	American Indian and Alaska Native alone
P1.	6	2	Asian alone
P1.	7	2	Native Hawaiian and Other Pacific Islander alone
P1.	8	2	Some Other Race alone
P1.	9	1	Population of Two or More Races:
P1.	10	2	Population of two races:
P1.	11	3	White; Black or African American
P1.	12	3	White; American Indian and Alaska Native
P1.	13	3	White; Asian
P1.	14	3	White; Native Hawaiian and Other Pacific Islander
P1.	15	3	White; Some Other Race
P1.	16	3	Black or African American; American Indian and Alaska Native
P1.	17	3	Black or African American; Asian
P1.	18	3	Black or African American; Native Hawaiian and Other Pacific Islander
P1.	19	3	Black or African American; Some Other Race
P1.	20	3	American Indian and Alaska Native; Asian
P1.	21	3	American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
P1.	22	3	American Indian and Alaska Native; Some Other Race
P1.	23	3	Asian; Native Hawaiian and Other Pacific Islander
P1.	24	3	Asian; Some Other Race
P1.	25	3	Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	26	2	Population of three races:
P1.	27	3	White; Black or African American; American Indian and Alaska Native
P1.	28	3	White; Black or African American; Asian
P1.	29	3	White; Black or African American; Native Hawaiian and Other Pacific Islander
P1.	30	3	White; Black or African American; Some Other Race
P1.	31	3	White; American Indian and Alaska Native; Asian
P1.	32	3	White; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
P1.	33	3	White; American Indian and Alaska Native; Some Other Race
P1.	34	3	White; Asian; Native Hawaiian and Other Pacific Islander
P1.	35	3	White; Asian; Some Other Race
P1.	36	3	White; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	37	3	Black or African American; American Indian and Alaska Native; Asian
P1.	38	3	Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
P1.	39	3	Black or African American; American Indian and Alaska Native; Some Other Race
P1.	40	3	Black or African American; Asian; Native Hawaiian and Other Pacific Islander
P1.	41	3	Black or African American; Asian; Some Other Race
P1.	42	3	Black or African American; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	43	3	American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander
P1.	44	3	American Indian and Alaska Native; Asian; Some Other Race
P1.	45	3	American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	46	3	Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	47	2	Population of four races:
P1.	48	3	White; Black or African American; American Indian and Alaska Native; Asian
P1.	49	3	White; Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
P1.	50	3	White; Black or African American; American Indian and Alaska Native; Some Other Race
P1.	51	3	White; Black or African American; Asian; Native Hawaiian and Other Pacific Islander
P1.	52	3	White; Black or African American; Asian; Some Other Race
P1.	53	3	White; Black or African American; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	54	3	White; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander
P1.	55	3	White; American Indian and Alaska Native; Asian; Some Other Race
P1.	56	3	White; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	57	3	White; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	58	3	Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander
P1.	59	3	Black or African American; American Indian and Alaska Native; Asian; Some Other Race
P1.	60	3	Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	61	3	Black or African American; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	62	3	American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	63	2	Population of five races:
P1.	64	3	White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander
P1.	65	3	White; Black or African American; American Indian and Alaska Native; Asian; Some Other Race
P1.	66	3	White; Black or African American; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	67	3	White; Black or African American; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	68	3	White; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	69	3	Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P1.	70	2	Population of six races:
P1.	71	3	White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P2.		0	**HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE [73]**
P2.		0	Universe: Total population
P2.	1	0	Total:
P2.	2	1	Hispanic or Latino
P2.	3	1	Not Hispanic or Latino:
P2.	4	2	Population of one race:
P2.	5	3	White alone
P2.	6	3	Black or African American alone
P2.	7	3	American Indian and Alaska Native alone
P2.	8	3	Asian alone
P2.	9	3	Native Hawaiian and Other Pacific Islander alone
P2.	10	3	Some Other Race alone
P2.	11	2	Population of Two or More Races:
P2.	12	3	Population of two races:
P2.	13	4	White; Black or African American
P2.	14	4	White; American Indian and Alaska Native
P2.	15	4	White; Asian
P2.	16	4	White; Native Hawaiian and Other Pacific Islander
P2.	17	4	White; Some Other Race
P2.	18	4	Black or African American; American Indian and Alaska Native
P2.	19	4	Black or African American; Asian
P2.	20	4	Black or African American; Native Hawaiian and Other Pacific Islander
P2.	21	4	Black or African American; Some Other Race
P2.	22	4	American Indian and Alaska Native; Asian
P2.	23	4	American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
P2.	24	4	American Indian and Alaska Native; Some Other Race
P2.	25	4	Asian; Native Hawaiian and Other Pacific Islander
P2.	26	4	Asian; Some Other Race
P2.	27	4	Native Hawaiian and Other Pacific Islander; Some Other Race
			[*break in data*]
P2.	72	3	Population of six races:
P2.	73	4	White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race
P3.		0	**RACE FOR THE POPULATION 18 YEARS AND OVER [71]**
P3.		0	Universe: Total population 18 years and over
			<P3. Table Record Layout Matches P1. Table Record Layout>
P4.		0	**HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE FOR THE POPULATION 18 YEARS AND OVER [73]**
P4.		0	Universe: Total population 18 years and over
			<P4. Table Record Layout Matches P2. Table Record Layout>

Table 4.
2020 Census State Redistricting Data (Public Law 94-171) Summary File Layout—Con.

Table number	Cell count	Indent	
P5.		0	**GROUP QUARTERS POPULATION BY GROUP QUARTERS TYPE [10]**
P5.		0	Universe: Population in group quarters
P5.	1	0	Total:
P5.	2	1	Institutionalized population
P5.	3	2	Correctional facilities for adults
P5.	4	2	Juvenile facilities
P5.	5	2	Nursing facilities/Skilled-nursing facilities
P5.	6	2	Other institutional facilities
P5.	7	1	Noninstitutionalized population
P5.	8	2	College/University student housing
P5.	9	2	Military Quarters
P5.	10	2	Other noninstitutional facilities
H1.		0	**OCCUPANCY STATUS [3]**
H1.		0	Universe: Housing units
H1.	1	0	Total:
H1.	2	1	Occupied
H1.	3	1	Vacant

- Hispanic or Latino. A person of Cuban, Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race. The term, Spanish origin, can be used in addition to Hispanic or Latino.
- Native Hawaiian or Other Pacific Islander. A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific islands.
- White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

The OMB standards state that respondents should be offered the option of reporting more than one race. Additionally, the standards specify that when the two questions are collected separately, ethnicity should be collected first.

An individual's responses to the race and ethnicity questions are based upon self-identification. In accordance with current OMB standards, the 2020 Census include two separate questions for collecting data on race and ethnicity as was also done for the 2010 Census.

A total population in group quarters table has been added to assist those states that reallocate populations before redistricting. This table includes the group quarters categories of: institutionalized populations (correctional facilities for adults, juvenile facilities, nursing facilities/skilled nursing facilities, and other institutional facilities) and non-institutionalized populations (college/university student housing, military quarters, and other non-institutionalized facilities).

A housing unit table is included with the total universe of housing units and their status as vacant or occupied.

Continuing the Conversation

Responsible government at all levels begins with congressional and legislative boundaries that reflect an accurate count of the population. We hope this brochure helps you better understand the data and maps the Census Bureau provides and how you can use them in the redistricting process. You can learn more about the design and content of other Census Bureau data products from the Census Bureau's Internet site at <www.census.gov> and data download site at <https://data.census.gov>. More information about the 2020 Census RDP is available at <www.census.gov/rdo>. You may also contact our office by phone at 301-763-4039, by e-mail at <rdo@census.gov>, or by writing to:

U.S. Census Bureau
Redistricting & Voting Rights Data Office
Census Bureau Headquarters
Washington, DC, 20233

For more information on redistricting data, access the Census Redistricting and Voting Rights Data Office at <www.census.gov/rdo> and click on "Decennial Census P.L. 94-171 Redistricting Data Summary Files" or access the National Conference of State Legislatures at <www.ncsl.org>.

James Whitehorne
Chief
Census Redistricting & Voting Rights Data Office
<james.whitehorne@census.gov>
301-763-4039

Tom Morton
Assistant Chief
Census Redistricting & Voting Rights Data Office
<thomas.a.morton@census.gov>
301-763-4039

Jennie Karalewich
Lead Redistricting Specialist
Census Redistricting & Voting Rights Data Office
<jennie.karalewich@census.gov>
301-763-4039

FIRST-CLASS MAIL
POSTAGE & FEES PAID
U.S. Census Bureau
Permit No. G-58

Penalty for Private Use $300

OFFICIAL BUSINESS

U.S. Department of Commerce
U.S. CENSUS BUREAU
Washington, DC 20233

Strength in Numbers

A Guide to the 2020 Census Redistricting Data From the U.S. Census Bureau

United States® Census Bureau

U.S. Department of Commerce
U.S. CENSUS BUREAU
census.gov

United States® Census 2020